UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,742	01/12/2001	Ralf Hofmann	P-4356	9744

7590	07/27/2004

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EXAMINER
QUELER, ADAM M

ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 October 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>12 January 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>01 October 2003</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Application filed 1/12/2001, Priority

Papers filed 5/10/2002, and Information Disclosure Statement filed 10/01/2003

2.   Claims 1-24 are pending in the case. Claims 1, 10, 13, 20, and 24 are independent

claims.

Priority

3.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Information Disclosure Statement

4.   The information disclosure statement filed 10/1/2003 fails to comply with 37 CFR

1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently

understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the

content of the information, of each patent listed that is not in the English language. It has been

placed in the application file, but the information referred to therein has not been considered.

Referring to the International Search Report does not qualify as a concise explanation of the

relevance.

Specification

5.   The applicant is required to update the serial numbers and status of **ALL** related

applications as exemplified on page 24, line 13 of the specification.

Claim Objections

6.   Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 recites that a filter is made of chains of partial filters. It also recites that chains of partial filters convert source data to requested data. Therefore claim 1 recites converting source data to requested data, as also recited by claim 6.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   **Claims 20-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The claims are not directed to statutory subject matter because the claimed subject matter: Does not fall within one of the four statutory classes of inventions under 101; and/or falls, by analogy, within the printed matter exception to 101.

Data structures do not fall within one of the four statutory classes of invention under 101: process, machine, manufacture, and composition of matter. A data structure is clearly neither a "process" nor a "machine." With regard to the other statutory classes, the Supreme Court in Diamond v. Chakrabarty, 206 USPQ 193 (S. Ct. 1980), has defined a "manufacture" as "the production of articles for use from raw materials prepared by giving to these materials new forms, qualities, properties, or combinations whether by hand labor or by machinery" and has defined a "composition of matter" as "all compositions of two or more substances and ... all composite articles, whether they be results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders, or solids." Id. at 195-196. Clearly, a data structure, per se, cannot be considered a "manufacture" since a data structure is not produced from raw

materials and has no tangible, physical form or structure. Likewise, a data structure cannot be

considered a "composition of matter" since a data structure is not a composition of substances or

composite articles as contemplated by the Supreme Court. Accordingly, since a data structure

does not fall within one of the four statutory classes of inventions under 101, the claims are not

directed toward statutory subject matter.

Lastly, a data structure is considered non-statutory subject matter by analogy to the

"printed matter" exception under 101. See In re Miller, 164 USPQ 46, 49 (CCPA 1969). Like

printed matter, a data structure, in and of itself, is merely an arrangement of data and nothing

more. Furthermore, claims drawn to printed matter may be non-statutory even though the claims

recite the structure on which the printed matter is printed:

> The *mere arrangement* of printed matter on a sheet or sheets of paper, in book
>
> form or otherwise, does not constitute "any new and useful art, machine,
>
> manufacture, or composition of matter," or "any new and useful improvements
>
> thereof," as provided in section 4886, of the Revised Statutes [the predecessor to
>
> 35 U.S.C. 101].

(emphasis in original). In re Russell, 9 USPQ 181, 182 (CCPA 1931). At best, the claims as a

whole describe a data structure stored in a computer system. Accordingly, like printed matter

"stored" on a sheet of paper, a data structure stored in a computer system fails to present

statutory subject matter.

MPEP § 2106 states:

> When nonfunctional descriptive material is recorded on some computer-readable medium, it
> is not statutory since no requisite functionality is present to satisfy the practical application
> requirement. Merely claiming nonfunctional descriptive material stored in a computer-
> readable medium does not make it statutory. Such a result would exalt form over substance.

In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting").

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10.   **Claims 1-6, 8-16, 18-21, and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Bayeh et al. (US006012098A patented 1/4/2000).**

Regarding independent claim(s) 1, 10, 13 and 24, Bayeh teaches receiving a request for data (col. 4, ll. 23-29). Bayeh teaches a partial filter library as part of the server (col. 7, ll. 36-38). Bayeh teaches retrieving a rule set for a plurality of filters, or servlets, (col. 8, ll. 36-64), wherein upon being chained the filters convert source data to requested data (col. 4, ll. 23-37). Bayeh teaches the filter is a chain of partial filters, each of which as a generic format independent interface that passes data from one to another (col. 9, ll. 30-46).

Regarding dependent claim(s) 2, and 11, Bayeh teaches the filter renders source data differently (col. 4, ll. 37-42).

Regarding dependent claim(s) 3, 12, and 16, Bayeh teaches the filter converts source data from a first format to a second data format (col. 4, ll. 37-42).

Regarding dependent claim(s) 4 and 14, Bayeh teaches supporting different formats and selecting the second format (col. 8, ll. 55-57).

Regarding dependent claim(s) 5 and 15, Bayeh teaches selection scheme including conversion time (col. 8, ll. 43-48).

Regarding dependent claim(s) 6, Bayeh teaches converting from source to requested data using the filter (col. 4, ll. 23-37).

Regarding dependent claim(s) 8 and 18, Bayeh teaches input to the filter is a XSL style-sheet that determines its functionality (col. 9, ll. 4-6). As the filter is a servlet object, its input is passed through a parameter.

Regarding dependent claim(s) 9 and 19, Bayeh teaches input to the filter is a XSL style-sheet that determines its functionality (col. 9, ll. 4-6). As the filter is a servlet object, its input is passed through a parameter. As the filter processes an XSL stylesheet, equivalent to a transformation script, it is deemed to be an XSL processor.

Regarding independent claim(s) 20, Bayeh teaches a partial filter library as part of the server (col. 7, ll. 36-38). Bayeh teaches retrieving a rule set for a plurality of filters, or servlets, (col. 8, ll. 36-64), wherein upon being chained the filters convert source data to requested data (col. 4, ll. 23-37).

Regarding dependent claim(s) 21, Bayeh teaches the filter is a chain of partial filters, each of which as a generic format independent interface that passes data from one to another (col. 9, ll. 30-46).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claims 7, 17, 22, and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over

Bayeh as applied to claims 1, 13, and 20 above, and further in view of Garshol, "Free XML

Software", (12/15/199).

Regarding dependent claim(s) 7, 17, and 22, Bayeh does not teach a Simple API for XML.

Garshol teaches a Simple API for XML (p. 22), which includes a plurality of filters that can

accept the input and output of themselves (p. 24, "Parser Filters"). It would have been obvious

to one of ordinary skill in the art at the time of the invention to replace Bayeh's servlets with

Garshol's filters, as SAX was a de facto standard at the time of the invention (p. 22, "SAX").

Regarding dependent claim(s) 23, SAX's interface is inherently an XML document handler

interface, as proven at least by Applicant's specification (p. 39).

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

US-2002/0059344 A1 to BRITTON et al.
"Announcement: SAX - Simple API for XML (1998-01-12 Draft)"
□http://www.oasis-open.org/cover/SAXAnn980112.html
St.Laurent, Simon, "Toward a Layered Model for XML," (C) 1999
http://www.simonstl.com/articles/layering/layered.htm
"New SAXON Release (3.03)", 9/1/1998, http://xml.coverpages.org/saxon980901.html
M. Wallace and C. Runciman, "Haskell and XML: Generic combinators or type-based translation?" in
Proceedings of the Fourth ACM SIGPLAN International Conference on Functional Programming (ICFP'99),
vol.34–9.N.Y.: ACM Press, 27–29 1999, pp. 148–159.
"XT extension mechanism", 02 Jan 1999, http://www.oasis-open.org/cover/xt-extension199901.html

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam M Queler whose telephone number is (703) 308-5213. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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STEPHEN S. HONG
PRIMARY EXAMINER